

## Chapter 13

# Ancestral Pueblo Site Rehabilitation

*W. Bruce Masse*

A major goal of the CGFA Project was the development of various specific rehabilitation measures by which to minimize the damage caused to Ancestral Pueblo archaeological sites by the Cerro Grande Fire and its aftermath, and to provide long-term protection for these important cultural resources. This task was (and will be) achieved by using a four-step process that included two separate evaluations (the second of which was itself divided into two separate phases): the actual implementation of mitigation (rehabilitation) measures and a long-term monitoring program to review the success of the rehabilitation measures.

The initial evaluation was conducted by the LANL CRMT archaeologists between October 2000 and April 2002. The fieldwork methods are summarized in Chapter 5 of this report, and the findings and recommendations are summarized in Chapters 6 through 10. This critical effort provided important baseline data regarding the types and extent of fire damage at each assessed site and yielded an initial set of recommendations for rehabilitation.

Archaeologists are broadly trained in a variety of ecological and environmental disciplines. However, as the first evaluation progressed, it soon became apparent that the lack of specific training in forestry management and environmental engineering hampered our efforts at devising a consistent set of rehabilitation recommendations. For example, as pointed out in Chapter 5, it was not possible to develop a reliable set of standards by which to measure erosion that could be consistently applied at each site by the various field teams; although we were able to rate the threats on a relative scale, “low, moderate, and high.” In a similar vein, we also recommended snag removal and tree thinning at each site in a conservative manner, suggesting that only those trees and snags that were actually on a site mound itself should be removed.

Also during the first evaluation phase, the CRMT began discussions with the managers of the overall LANL CGRP about the possibility of involving our Pueblo neighbors in the rehabilitation of their ancestral sites. The CGRP immediately saw the value of such involvement both in terms of allowing members of the Pueblos to view and work at sites long closed to their access, and in terms of some degree of economic development for the people involved in these efforts. Most importantly, the involvement of tribal members enabled the Pueblos to provide an important perspective on the cultural resources at LANL based on their own historical knowledge that is sometimes missing from, but is complementary to, that of western science.

The CGRP in concert with CRMT contacted the Governors of the Pueblos of San Ildefonso, Santa Clara, Cochiti, and Jemez to discuss their involvement in the rehabilitation efforts. After a series of meetings,

the four Pueblos decided to work in concert with the CRMT to help rehabilitate these important Ancestral Pueblo cultural resources.

To this end, LANL set up direct contracts with the four Pueblos, which represent the first such Native American contracts in the history of LANL, through the auspices of the CGRP. This collaboration was purposefully expanded by CGRP to include aspects of forestry and erosion control management outside of the boundaries of the archaeological sites. As a result, the contracts have become a significant component of the overall CGRP efforts at LANL. This innovative and unique collaborative project is being conducted at Ancestral Pueblo sites through the period of April 2002 to September 30, 2003.

Because Pueblo rehabilitation crews had not previously viewed the sites included in this study, the CGRP contracts involved the establishment of a Cultural Resources Assessment Team (CRAT) from the Pueblos of San Ildefonso and Santa Clara. The CRAT consists of tribal cultural specialists, and forestry and erosion control experts, assisted by specialists from the LANL CGRP and the CRMT.

During April and May 2002, the CRAT reevaluated 72 cultural sites included in the present report, specifically in TA-5, TA-49, TA-60, and Rendija Canyon. In September and October 2002 the CRAT reevaluated 46 additional sites in DX and ESA contained in this report. The 118 sites were selected by the CGFA Project director, W. Bruce Masse. The selection process was based on the findings and recommendations of the initial CRMT evaluations, the consideration of perceived cultural sensitivities that might be associated with the sites, and the results of discussions with foresters and erosion control experts within CGRP. The final list of sites selected for CRAT evaluation differed somewhat from the field recommendations for site rehabilitation contained in this report, especially by the inclusion of sites where snags were present away from rubble mounds. As previously stated, originally, CGRP field crews recommended snag removal only when snags were actually on site mounds themselves. CRAT also includes all sites that have any fire related erosion, while CGRP recommendations were only for sites with moderate to high threats from erosion.

The report generated by the CRAT for the 72 sites in Rendija Canyon and TA-5, TA-49, and TA-60 includes a discussion of “cultural sensitivities” for each site along with specific and general recommendations for rehabilitation (CRAT 2002). These recommendations include the placement of a total of 244 straw wattles, the use of over 24 ac of native seed, the removal of hundreds of trees and snags, and the placement of 32,330 linear feet of wire fence. A substantial portion of the fencing was recommended in the form of district fences that enclose more than a single site. These district fences take into account various aspects of cultural sensitivities and the need for site protection. Because of the nature of the cultural sensitivities for the Pueblos, CRAT and CGRP decided to classify the CRAT (2002) report as “Official Use Only” so that only facility managers and other persons with a “need to know” would have access to its contents and recommendations.

The second phase of the CRAT evaluation, which began in September 2002, is currently ongoing as of the publication of the present report (October 2002). The second phase will be immediately followed by actual site rehabilitation accomplished by Pueblo crews. The rehabilitation includes an ambitious program of rehabilitation and protection at selected Ancestral Pueblo archaeological sites on LANL property impacted by the Cerro Grande Fire. This consists of the removal of snags and fallen trees, the thinning of some live trees at the individual sites and the scattering of the slash from these trees, filling in stump holes, implementing erosional control measures (such as the use of straw wattles and the sowing of native seed), and the construction of fences and other protective measures for sites situated near fire roads and in the vicinity of designated emergency operations areas. These rehabilitation measures are being conducted using hand equipment to prevent inadvertent damage to the sites by motorized vehicles and other heavy equipment.

The final management task of both the rehabilitation project and the CGFA Project is to design and implement a long-term site monitoring program. This program will be used not only to monitor the damage incurred by selected archaeological sites, but also to judge the overall success of the archaeological site rehabilitation program itself. Annual repeat photography is anticipated to be combined with other measures to track significant changes in the character of individual sites over a period of several years. The results of the monitoring program, like that of this initial damage assessment, will be made available to our Pueblo neighbors and can be made available to other land management agencies upon request.

